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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/827,270	04/04/2001	Pankaj Gupta	211.1001.01	4364

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SWERNOFSKY LAW GROUP PC
P.O. BOX 390013
MOUNTAIN VIEW, CA 94039-0013

EXAMINER

ANDERSON, MATTHEW D

ART UNIT PAPER NUMBER

2186

DATE MAILED: 06/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/827,270

Applicant(s)

GUPTA ET AL.

Examiner

Matthew D. Anderson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17-29 and 38-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17-29 and 38-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10/22/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of claims 17-29 and 38-44 in the reply filed on 5/18/05 is acknowledged. In said response, non-elected claims 1-16 and 30-37 have been canceled.

Specification

2. The disclosure is objected to because of the following informalities: cross-referenced applications I listed on page 8 should have their status updated. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 17-29 and 38-44 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 17 recites the limitation "said information" in line 5. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 38 recites the limitations "said sequence of inputs" and "said output" in lines 7-8. There is insufficient antecedent basis for this limitation in the claim.

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7. The terms “substantially equaling” in claims 17 and 38, “substantially concurrently” in claim 18, “substantially equal” in claim 20, “substantially included” in claim 22, are relative terms which renders the claim indefinite. These “substantially” terms are not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 17-18, 20-23, 25, 26, and 28 are rejected under 35 U.S.C. 102(b) as being anticipated by Wakerly (US Patent # 5,586,299).

10. With respect to claim 17, Wakerly discloses:

coupling each one of a sequence of inputs to a sequence of memories, said sequence having a last memory and a next memory corresponding to each said memory other than said last memory, wherein each said memory is responsive to a distinct portion of said information; coupling a result from each said memory other than said last memory to its corresponding said next memory in said sequence; and providing an output of at least one of said memories, as shown in figure 7;

whereby said sequence of inputs is each coupled to said sequence of memories in a pipelined manner to provide said output at a rate substantially equaling one output as each input is received, as shown in figure 8.

11. With respect to claim 18, Wakerly discloses concurrently providing results responsive to a plurality of said inputs accessing different subsequences of said memories, as shown in figure 8.

12. With respect to claim 20, Wakerly discloses wherein each said input has substantially equal amounts of said information, by teaching in column 7, lines 40-45 of particular modules using 16 bit words.

13. With respect to claim 21, Wakerly discloses wherein said sequence of inputs includes at least one of: a destination IP address, an IP address, packet header information, as taught in column 1, lines 30-35.

14. With respect to claim 22, Wakerly discloses wherein said sequence of memories are substantially included in a single monolithic integrated circuit, by teaching in column 10 that the pipeline registers in figure 7 are part of the pipeline 12 with the circuit of figure 1.

15. With respect to claim 23, Wakerly discloses wherein said output is responsive to a sequence of individual memory accesses, each said individual memory access being performed at one of said memories, as taught in figure 8.

16. With respect to claim 25, Wakerly discloses wherein said sequence of individual memory accesses includes one said individual memory access at each said memory, as taught in figure 8.

17. With respect to claim 26, Wakerly discloses wherein said sequence of individual memory accesses includes one said individual memory access at each said memory, followed by a second

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individual memory access at each said memory for at least a subsequence of said memories, as taught in figure 8.

18. With respect to claim 28, Wakerly discloses wherein said sequence of memories collectively include lookup results including at least one datum responsive to each one of said inputs, as taught in column 12, lines 10+.

Allowable Subject Matter

19. Claims 19, 24, 27, and 29 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

20. Claims 38-44 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

21. The following is an examiner's statement of reasons for allowance: the prior art does not teach or suggest the combination of claim elements specifically including at least the limitations in each indicated dependent claim, and with regard to independent claim 38, each said memory being coupled to a distinct portion of one of a sequent of lookup search keys, whereby said sequence or inputs is each coupled to said sequent of memory in a pipelined manner to provide said output at a rate equaling one output as each input is received..

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

22. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew D. Anderson whose telephone number is (571) 272-4177. The examiner can normally be reached on Monday-Friday, 2nd Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew M. Kim can be reached on (571) 272-4182. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Matthew D. Anderson
Primary Examiner
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